



Route Pattern Configuration

A route pattern comprises a string of digits (an address) and a set of associated digit manipulations that can be assigned to a route list or a gateway. Route patterns provide flexibility in network design. They work in conjunction with route filters and route lists to direct calls to specific devices and to include, exclude, or modify specific digit patterns.

Refer to [“Understanding Route Plans”](#) in *Cisco CallManager System Guide* for more detailed route pattern information.

Use the following topics to add, update, copy, or delete a route pattern:

- [Finding a Route Pattern, page 17-1](#)
- [Adding a Route Pattern, page 17-3](#)
- [Updating a Route Pattern, page 17-5](#)
- [Copying a Route Pattern, page 17-6](#)
- [Deleting a Route Pattern, page 17-7](#)
- [Route Pattern Configuration Settings, page 17-8](#)

Finding a Route Pattern

Because you might have several route patterns in your network, Cisco CallManager lets you locate specific route patterns based on specific criteria. Use the following procedure to locate route patterns.

Procedure

Step 1 Choose **Route Plan > Route Pattern**.

The Find and List Route Patterns window displays.

Step 2 From the drop-down list box, choose one of the following criteria:

- begins with
- contains
- ends with
- is exactly

Step 3 Specify the appropriate search text, if applicable and click **Find**. You can also specify how many items per page to display.



Note To find all route patterns registered in the database, click **Find** without entering any search text.

A list of discovered route patterns displays by:

- Route pattern
- Partition
- Route filter



Note You can delete multiple route patterns from the Find and List Route Patterns window by checking the check boxes next to the appropriate route patterns and clicking **Delete Selected**. You can delete all of the route patterns on the window by checking the check box in the matching records title bar and clicking **Delete Selected**.

Step 4 Click the route pattern from the list of records that matches your search criteria.

The window displays the route pattern you choose.

Related Topics

- [Adding a Route Pattern, page 17-3](#)
- [Updating a Route Pattern, page 17-5](#)
- [Copying a Route Pattern, page 17-6](#)
- [Deleting a Route Pattern, page 17-7](#)
- [Route Pattern Configuration Settings, page 17-8](#)

Adding a Route Pattern

This section describes how to add a route pattern.

Before You Begin

Ensure that the following items are configured in Cisco CallManager:

- Gateway
- Route list
- Partition
- Route filter

**Timesaver**

Assigning 8XXX to a gateway routes all directory numbers 8000 to 8999 out the gateway. Similarly, 82XX routes directory numbers 8200 to 8299. See the [“Special Characters and Settings” section on page 20-1](#) for more information about wildcards.

Procedure

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- Step 1** Choose **Route Plan > Route Pattern**.
 - Step 2** Click **Add a New Route Pattern**.
 - Step 3** Enter the appropriate settings as described in [Table 17-1](#).

Step 4 Click **Insert**.



Note

Once you click **Insert** and the window refreshes, an **(Edit)** link appears on the window next to the Gateway/Route List field. This link takes you to the Gateway Configuration or Route List Configuration window for reference; depending on whether the Gateway/Route List field contains a gateway or a route list; so you can see the route group(s) included in that route list, if route group(s) was specified. If not, you see devices.


Related Topics

- [Finding a Route Pattern, page 17-1](#)
- [Route Pattern Wildcards and Special Characters, page 20-1](#)
- [Adding a Route Filter, page 14-4](#)
- [Updating a Route Pattern, page 17-5](#)
- [Copying a Route Pattern, page 17-6](#)
- [Deleting a Route Pattern, page 17-7](#)
- [Route Pattern Configuration Settings, page 17-8](#)
- [Understanding Route Plans, *Cisco CallManager System Guide*](#)

Updating a Route Pattern

This section describes how to update a route pattern.

Procedure

- Step 1** Choose **Route Plan > Route Pattern**.
- Step 2** Locate the route pattern you want to update. See the [“Finding a Route Pattern” section on page 17-1](#).
-  **Note** If you change the gateway/route list, you must hit **Update** prior to selecting the **Edit** link. Otherwise, you’re linked to the previous gateway/route list.
- Step 3** Update the appropriate settings as described in the [“Route Pattern Configuration Settings” section on page 17-8](#).
- Step 4** Click **Update**.
- The updated route pattern displays.
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Related Topics

- [Finding a Route Pattern, page 17-1](#)
- [Route Pattern Wildcards and Special Characters, page 20-1](#)
- [Adding a Route Filter, page 14-4](#)
- [Adding a Route Pattern, page 17-3](#)
- [Copying a Route Pattern, page 17-6](#)
- [Deleting a Route Pattern, page 17-7](#)
- [Route Pattern Configuration Settings, page 17-8](#)
- [Understanding Route Plans, Cisco CallManager System Guide](#)

Copying a Route Pattern

This section describes how to copy a route pattern.

Procedure

- Step 1** Choose **Route Plan > Route Pattern** in the menu bar.
- Step 2** Locate the route pattern you want to copy. See the [“Finding a Route Pattern” section on page 17-1](#).
- Step 3** Check the check box next to the route pattern you want to copy.
- Step 4** Click the **Copy** icon of that route pattern.
The window displays the copy of the route pattern.
- Step 5** Update the appropriate settings as described in [Table 17-1](#).
- Step 6** Click **Insert** to add the new route pattern.



Note Once you click **Insert** and the window refreshes, an **(Edit)** link appears on the window next to the Gateway/Route List field. This link takes you to the Gateway Configuration or Route List Configuration window for reference; depending on whether the Gateway/Route List field contains a gateway or a route list; so you can see the route group(s) included in that route list, if route group(s) was specified. If not, you see devices.



Tips

You can also copy a route pattern by locating and displaying the route pattern you want to copy and clicking **Copy**. Then, follow the instructions in [Step 5](#) through [Step 6](#).

Related Topics

- [Finding a Route Pattern, page 17-1](#)
- [Route Pattern Wildcards and Special Characters, page 20-1](#)

- [Adding a Route Filter, page 14-4](#)
- [Adding a Route Pattern, page 17-3](#)
- [Updating a Route Pattern, page 17-5](#)
- [Deleting a Route Pattern, page 17-7](#)
- [Route Pattern Configuration Settings, page 17-8](#)
- [Understanding Route Plans, Cisco CallManager System Guide](#)

Deleting a Route Pattern

This section describes how to delete a route pattern.

Procedure

- Step 1** Choose **Route Plan > Route Pattern**.
- Step 2** Locate the route pattern you want to delete. See the [“Finding a Route Pattern” section on page 17-1](#).
- Step 3** Check the check box of the route pattern you want to delete and click **Delete Selected**.

A message displays, stating that you cannot undo this action.

- Step 4** Click **OK** to delete the route pattern or **Cancel** to cancel the deletion.



Tips

You can also delete a route pattern by locating and displaying the route pattern you want to delete and clicking **Delete**.

Related Topics

- [Finding a Route Pattern, page 17-1](#)
- [Route Pattern Wildcards and Special Characters, page 20-1](#)
- [Adding a Route Filter, page 14-4](#)
- [Adding a Route Pattern, page 17-3](#)

- [Updating a Route Pattern](#), page 17-5
- [Copying a Route Pattern](#), page 17-6
- [Route Pattern Configuration Settings](#), page 17-8
- [Understanding Route Plans](#), *Cisco CallManager System Guide*

Route Pattern Configuration Settings

[Table 17-1](#) describes the available fields on the Route Pattern Configuration window.

Table 17-1 *Route Pattern Configuration Settings*

Field	Description
Route Pattern	<p>Enter the route pattern, including numbers and wildcards (do not use spaces); for example, 9.@ for typical local access, or 8XXX for a typical private network numbering plan.</p> <p>Note Ensure the directory route pattern, using the chosen partition, route filter, and numbering plan combination, is unique. Check the route pattern, translation pattern, directory number, call park number, call pickup number, or Meet Me number if you receive an error indicating duplicate entries.</p> <p>See the “Route Pattern Wildcards and Special Characters” section on page 20-1 for more information about wildcards.</p>
Partition	<p>Choose a partition. If you do not want to assign a partition, choose “None.” See the “Partition Configuration” section on page 12-1 for more information on how to use partitions.</p>
Numbering Plan	<p>Choose a numbering plan.</p>

Table 17-1 Route Pattern Configuration Settings (continued)

Field	Description
Route Filter	If your route pattern includes the @ wildcard, you may choose a route filter. Choosing a route filter restricts certain number patterns and are optional.
Gateway/Route List	<p>Choose the gateway or route list for which you are adding a route pattern.</p> <p>Note If at least one port of the defined gateway included in a route group does not exist, or has an assigned DN, this drop-down list box does not include that gateway. When a gateway is chosen in the drop-down list box, all the ports are being used to route/block this route pattern. This is not true for MGCP gateways.</p>
Route Option	The Route Option designation indicates whether you want this route pattern used for routing calls (such as 9.@ or 8[2-9]XX) or for blocking calls. Choose the Route this pattern or Block this pattern radio button.
Provide Outside Dial Tone	Check the check box if appropriate.
Urgent Priority	Check the check box if appropriate.
Use Calling Party's External Phone Number Mask	<p>Check the check box if you want the full, external phone number used for CLID on outgoing calls. You may also configure an External Phone Number Mask on all phone devices.</p> <p>Note The calling party transformation settings assigned to the route groups in a route list override any calling party transformation settings assigned to a route pattern associated with that route list.</p>

Table 17-1 Route Pattern Configuration Settings (continued)

Field	Description
Calling Party Transform Mask	Enter a transformation mask value. Valid entries include the digits 0 through 9, the wildcard character X, and blank. If this field is blank and the preceding field is not checked, no calling party transformation takes place. See the “Calling Party Transformations Settings” section on page 20-19 for more information.
Discard Digits	Choose the discard digits instructions you want associated with this route pattern from the Discard Digits drop-down list box. See the “Discard Digits Instructions” section on page 20-5 for more information.
Called Party Transform Mask	Enter a transformation mask value. Valid entries include the digits 0 through 9, the wildcard character X, and blank. If the field is blank, no transformation takes place. Cisco CallManager sends the dialed digits exactly as dialed.
Prefix Digits (Outgoing Calls)	Enter prefix digits in the Prefix Digits (Outgoing Calls) field. Valid entries include the digits 0 through 9, #, *, and blank. Note The appended prefix digit does not affect which directory numbers route to the assigned device.

Related Topics

- [Finding a Route Pattern, page 17-1](#)
- [Adding a Route Pattern, page 17-3](#)
- [Updating a Route Pattern, page 17-5](#)
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